

**REMARKS**

Amendments to the claims have been made to respond to the issues and concerns raised in the Office Action, to clarify aspects in the specification and claims, and to refine claim language. The amendments are believed to be consistent with the disclosure originally filed. The amendments also have been particularly presented to avoid, where applicable, any admission of estoppel, generally, negatively affecting the scope of protection provided by the disclosure and claims of the present application, and also in a manner that avoids prosecution history estoppel, limitation of the scope of equivalences, or the like. The Applicant amends all claims and adds new claims 138-145 to this application. Thus, claims 45-51 and 136-145 remain in this application and are believed in a condition for allowance.

The Office Action raised obviousness concerns under 35 U.S.C. § 103 with respect to claims 45-51 and 136-137. A prima facie case of obviousness requires that the combination of references disclose all the limitations of the claimed invention. § 2143, MPEP; § 2143.03, MPEP; In re Royka, 490 F.2d 981 (CCPA 1974). If an independent claim is nonobvious under 35 U.S.C. § 103, then any claim depending therefrom is nonobvious. §2143.03, MPEP; In re Fine, 837 F.2d 1071 (Fed. Cir. 1988).

The Office Action noted that the Applicant, in response to the prior Office Action, presented arguments directed towards limitations not recited in the claims. Applicant apologizes for the confusion this may have caused and believes that the present amendments, described as follows, rectify the situation. Applicant has amended the claims so as to be directed toward a method of establishing an equine artificial insemination sample for equine artificial insemination involving "viable equine sperm cells." (emphasis added). The recitation of "viable equine sperm cells" (emphasis added) has been included in each of the individual dependent claims. Applicant also notes that the references cited in the Office Action do not teach the recitation of claim 45, element "h," as amended, which recites "establishing a skim milk solution into which said droplets separated based upon said sex characteristic of said viable equine sperm cells entrained are collected." The teaching of the references applies to an extender for sperm cells prior to sorting, whereas the claims of the present case recite a solution for collecting sperm cells

after sorting. This distinction is significant. It is one of the features that contributes to the new ability to have viable equine sperm cells after the stresses of sorting based upon a sexed characteristic, and permits a sample that is now capable of fertilizing an egg of an equine mammal. As noted in the Office Action, in the reference the extender is used to provide a medium that could be used for freezing and then thawing the sorted equine sperm. By contrast, as described in the specification at page 21, the present invention now uses this fluid as the collector fluid to minimize the stresses of sorting upon sperm cells by providing an easier reception at the collection stage. The specification even further states that "though intended for a different purpose, this extender can be used as the collection fluid for equine sperm cells." The teaching of the references is different from the recitations of the present claims; the combination of the references do not render the present subject matter obvious per the requirements of the statute, the MPEP, and case law cited above.

While the Applicant believes the foregoing arguments to be sufficient for allowability of the rejected claims, the Applicant presents certain additional arguments as follows. The Office Action expressed obviousness concerns with respect to the numerical values listed in claims 50 and 51. Applicant respectfully disagrees that these numerical values would have been obvious. Of course, once traversed, it is improper to maintain an allegation unsupported by evidence. As the courts have long stated:

[W]e reject the notion that judicial or administrative notice may be taken of the state of the art. The facts constituting the state of the art are normally subject to the possibility of rational disagreement among reasonable men and are not amenable to the taking of such notice. If evidence of the knowledge possessed by those skilled in the art is to be properly considered, it must be timely injected into the proceedings.

In re Eynce, 480 F.2d 1364 (CCPA 1973). Further, Examiners are even cautioned in their training materials against basing rejections on allegations of their personal impressions of what might be a design choice – essentially what might be obvious. To maintain such an allegation, evidence is necessary. Here, no combination of references suggest that a flow cytometer should be operated at 50 psi as claimed and yet still get viable equine sperm cells. Additionally, no combination of references suggest separating at a rate of at least 900 viable equine sperm cells

per second as set forth in the previous claim 50 and the new independent claim 138. Because the Applicant discloses a method usable for successful artificial insemination with viable sorted equine sperm cells, this result is unexpected. Contrary to the assertion made in the Office Action, it is incumbent upon the Office to provide evidence supporting its allegation that the stated values are in fact obvious. With respect to claims 136 and 137, the Applicant notes that there are common authors and inventors respectively listed on the Schmid reference and the application in the present case. Although not available for submission with this filing, the Applicant anticipates that it will remove the Schmid reference as set forth in § 715.01(c), MPEP through a supplement to this response once the signed affidavit is available. Consequently, by the time this response is reviewed, the Schmid reference no longer will be available to the Office as a ground of rejection.

The Office Action expressed indefiniteness concerns under 35 U.S.C. § 112, Second Paragraph, with respect to claims 45-51 and 136-137. The Applicant has amended the claims to recite a "method of establishing an equine artificial insemination sample for equine artificial insemination." The Applicant believes this amendment addresses the concern as best understood.

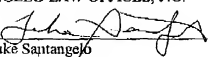
The Applicant, having addressed each of the Office Action's concerns, respectfully requests reconsideration and withdrawal of the rejections and objections to the application. Allowance of claims 45-51 and 136-145 is requested at the examiner's earliest convenience.

Dated this 7<sup>th</sup> day of April, 2004.

Respectfully submitted,

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